

Abstract:

A novel tufting needle (4) is distinguished by a hollow flute (15) which is preferably symmetrical to a central plane (29) and which is bilaterally provided with chamfers (33, 34). The chamfers (33, 34) are, in an inward-located, that is, in a region lying close to the central plane (29), inclined at a small acute angle ( $\alpha$ ) to a reference plane (28), while in a region bordering an externally located rim (edges (46, 47)), the chamfers (33, 34) are inclined at a larger acute angle ( $\beta$ ) to the reference plane (28). This feature improves the rigidity, the tufting properties and the mechanical strength, as well as the wear resistance of the novel tufting needle (4).